



## Category 6 U/UTP - Unshielded Twisted Pair LSZH Cable

The Category 6 Unshielded Twisted Pair (U/UTP) LSZH cable with 4 x 2 x 23 AWG copper wire structure fully complies with ISO/IEC 11801 and TIA/EIA 568 standards. They ensure optimum bandwidth for today's high speed network applications and are designed to deliver a robust standard based performance. OptronicsPlus Cat6 U/UTP cable exceeds Cat6/Class E performance requirements and supports 10-BASE-T, 100-BASE-TX and 1000Base-T applications. It is available with flame retardant LSZH outer jacket.

### Features

- 23 AWG conductors
- Exceeds Cat6 performance requirements
- ISO/IEC 11801 and TIA/EIA568 compliant
- Available with flame retardant LSZH outer jacket
- Supplied in 305m boxes or 500m reels
- Printed metre marks

### Applications

- Cat6/Class E up to 250Mhz applications
- 10BASE-T, 100BASE-TX, 1000Base-T applications
- Horizontal network installations
- Backwards compatible with Category 5e distribution systems

## Specifications

### CONSTRUCTION

Conductor	23AWG; Solid bare copper
Conductor Nom. O.D	0.55 ± 0.005 mm
Insulation	HDPE
Insulation Nom. O.D	1.00 ± 0.05 mm
Central Element O.D	4.8 (REF)+CROSS
Rip Cord	Yes
Outer Sheath	LSZH
Overall Diameter	6.0 ± 0.3mm
Thickness	0.55 ± 0.05 mm
Colour	Optional
Conductor resistance	≤9.38 Ω/100m
Resistance unbalance within a pair	≤2.0 %
Resistance unbalance between pairs	≤5.0%
Insulation resistance	≥5000 MΩkm
Mutual capacitance	≤5.6 nF/100m
Minimum Elongation at Break of the Sheath	≥125%
Minimum Tensile Strength of Sheath	≥10 MPa
Storage Temperature Range	-15°C to +60°C
Installation Temperature Range	0°C to +50°C
Cold Bend ( -20±2°C ×4)	8×Cable O.D. No visible cracks

## Transmission Line Performance

FREQUENCY (MHz)	RETURN LOSS ≥dB	ATT ≤dB	NEXT ≥dB	ACRF ≥DB	PS NEXT DB	PS ACRF DB
4	23.0	3.8	65.3	55.8	63.3	52.8
8	24.5	5.3	60.8	49.7	58.8	46.7
10	25.0	6.0	59.3	47.8	57.3	44.8
16	25.0	7.6	56.2	43.7	54.2	40.7
20	25.0	8.5	54.8	41.8	52.8	38.8
25	24.3	9.5	53.3	39.8	51.3	36.8
31.25	23.6	10.7	51.9	37.9	49.9	34.9
62.5	21.5	15.4	47.4	31.9	45.4	28.9
100	20.1	19.8	44.3	27.8	42.3	24.8
200	18.0	29.0	39.8	21.8	37.8	18.8
250	17.3	32.8	38.3	19.8	36.3	16.8

## Standards Compliance

The CAT6 U/UTP LSZH cable is manufactured and tested directly in accordance with the major industry standards:

- Class E / Category 6
- ANSI/TIA/EIA-568-C.2
- ISO/IEC 11801 2<sup>nd</sup> Edition
- EN 50173
- IEC 61156-5
- EN 50288-3-1
- IEC 60332-1
- IEC 60754-2
- IEC 61034
- RoHS
- REACH / SvHC

## Ordering Information

DESCRIPTION	PART NUMBER
CAT6 U/UTP 23 AWG LSZH Cable Violet - 305m box	OCC-6-11-305
CAT6 U/UTP 23 AWG LSZH Cable Violet - 500m reel	OCC-6-11-500
CAT6 U/UTP 23 AWG LSZH Cable Blue - 305m box	OCC-6-11-305-2
CAT6 U/UTP 23 AWG LSZH Cable Blue - 500m reel	OCC-6-11-500-2
CAT6 U/UTP 23 AWG LSZH Cable Yellow - 305m box	OCC-6-11-305-3
CAT6 U/UTP 23 AWG LSZH Cable Yellow - 500m reel	OCC-6-11-500-3
CAT6 U/UTP 23 AWG LSZH Cable Green - 305m box	OCC-6-11-305-4
CAT6 U/UTP 23 AWG LSZH Cable Green - 500m reel	OCC-6-11-500-4
CAT6 U/UTP 23 AWG LSZH Cable Red - 305m box	OCC-6-11-305-5
CAT6 U/UTP 23 AWG LSZH Cable Red - 500m reel	OCC-6-11-500-5
CAT6 U/UTP 23 AWG LSZH Cable Orange - 305m box	OCC-6-11-305-8
CAT6 U/UTP 23 AWG LSZH Cable Orange - 500m reel	OCC-6-11-500-8

## Additional Images

